

ABSTRACT OF THE DISCLOSURE

An OLED device produces white light more effectively matching the response of multicolor filters in an OLED device including an anode and a cathode and an organic EL element disposed between the anode and cathode having at least two different dopants for collectively emitting white light. The device includes a color filter array disposed over the EL element and including at least three separate filters having bandpass spectra for passing red, green, and blue light, respectively, in response to white light to produce preselected color outputs, and the composition of one or more of the dopants being selected to change the spectrum of the white light to be compatible with the spectrum of the color filters by having peak responses in the white light spectrum corresponding to the bandpass spectra of the red and blue color filters whereby the white light more effectively matches the responses of the color filters.